REMARKS

The specification has been amended to provide a cross-reference to the previously filed International Application. The claims have also been amended to delete multiple dependencies and to place the application into better form for examination. Entry of the present amendment and favorable action on the above-identified application are earnestly solicited.

Attached hereto is a marked-up copy of the changes made to the application by this Amendment.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

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Attachment: Version With Markings Showing Changes Made

(Rev. 01/22/01)

VERSION WITH MARKINGS SHOWING CHANGES MADE

The specification has been amended to provide cross-referencing to the International Application.

The claims have been amended as follows:

4. (Amended) A catalyst system according to claim 2 [or 3], characterized in that in said first step, said mixture consisting essentially of said solid transition metal compound and said oil has been prepared by heating them together at an elevated temperature, preferably at a temperature between about 26°C and about 100°C, most preferably at a temperature between about 30°C and about 80°C.

5. (Amended) A catalyst system according to [any preceding claim]claim 1, characterized in that in said first step, said solid transition metal compound, said organoaluminum compound and said oil are precontacted at a lowered temperature, preferably at a temperature between -20°C and about +20°C, most preferably at a temperature between about 0°C and about +16°C.

6. (Amended) A catalyst system according to [any preceding claim]claim 1, characterized in that in said first step, said organoaluminum compound (Al_1) and said solid transition metal

(Tr) compound are contacted in the presence of said at least a part of the oil in an atomic ration Al_1/Tr of between 0.5 and about 5, preferably between about 1 and about 3.

7. (Amended) A catalyst system according to [any preceding claim]claim 1, characterized in that in said first step, said first reaction mixture is further contacted with a wax, fat, solid paraffin or the like to give a waxed first reaction mixture.

9. (Amended) A catalyst system according to [any preceding claim]claim 1, characterized in that in said second step, said first reaction mixture or said waxed first reaction mixture is further activated with said second organoaluminum compound.

12. (Amended) A catalyst system according to [any preceding claim]claim 1, characterized in that the atomic ratio between the aluminum (Al_1) of said first organoaluminum compound Al_1/Al_2 is between about 0.0001 and about 1, preferably between about 0.01 and about 0.1.

13. (Amended) A catalyst according to [any preceding claim]claim 1, characterized in that the atomic ratio between the aluminum (Al) of the total amount of or organoalumminum compound and the transition metal (Tr) of the solid transition metal compound Al/Tr is between about 10 and 1000, preferably between about 50 and 500.

14. (Amended) A catalyst system according to [any preceding claim]claim 1, characterized in that said solid transition metal compound has been prepared by contacting at least magnesium dichloride or a complex thereof, titanium tetrachloride and an internal electron donor.

15. (Amended) A catalyst system according to [any preceding claim]claim 1, characterized in that said first organoaluminum compound has the formula (I):

$$R_{3m-n}Al_mX^n$$

Wherein R is a C_1-C_{12} alkyl, X is a halogen, m is 1 or 2 and $0 \leq n \leq (3m-1)$, and preferably is a trialkyl aluminum, most preferably triethyl aluminum TEA.

16. (Amended) A catalyst system according to [any preceding claim]claim 1, characterized in that said second organoaluminum compound is the same as said first organoaluminum compound.

17. (Amended) A catalyst system according to [any preceding claims]claim 1, characterized in that in the prepolymerization, the premonomer is polymerized in the presence of at least said second reaction mixture to give a prepolymerizate.

18. (Amended) A catalyst system according to [any preceding claim]claim 1, characterized in that in the prepolymerization,

the atomic ratio Al_{1+2}/Tr between, on one hand, the aluminum (Al_2) of said second organoaluminum compound and the aluminum (Al_1) if first organoaluminum compound taken together, and, on the other hand, the transition metal (Tr) if said transition metal compound, is from about 1 to about 10, preferably from about 3 to about 8.

19. (Amended) A catalyst system according to [any preceding claim]claim 1, characterized in that in prepolymerization, the amount of said olefin premonomer is such that the obtained weight ratio between the prepolymer obtained therefrom and said solid transition metal catalyst compound is between 1 and 10, preferably between 1 and 5.

20. (Amended) A catalyst system according to [any preceding claim]claim 1, characterized in that in the prepolymerization, said olefin premonomer is ethene.

21. (Amended) A process for the polymerization of an olefin, characterized in that an α-olefin is contacted with a catalyst system according to [any of claims 1-20]claim 1.

24. (Amended) A process according to [claim 21, 22 or 23]claim 21 or 22, characterized in that the olefin is contacted with a third organoaluminum compound.

26. (Amended) A process according to claim 24 [or 25], characterized in that the total amount of aluminum Al) is such that the atomic ratio Al/Tr is 40-1000, preferably about 50 to about 500.

27. (Amended) A process according to [any of claims 21 to 26]claim 21, characterized in that hydrogen is contacted with said catalyst system and said olefin under polymerization conditions, preferably in an amount giving propylene polymer having a melt flow rate MFR_2 of between 0.3 g/10 min and 2000 g/10 min, more preferably 0.3-1000 g/10 min, most preferably between 1.0 g/10 min and 400 g/10 min.